

# ***Georgia Department of Transportation***

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## ***Interstate System Plan Interim Report Evaluation of Needs***

***presented by***

***Cambridge Systematics, Inc.***

***with***

***Day Wilburn Associates, Inc.***

***Greenhorne and O'Mara, Inc.***

***Street Smarts, Inc.***

***September 2003***



# ***The Interstate System***

***April 27, 1939 - President Roosevelt  
recommended to Congress action on:***

***“special system of direct interregional  
highways, with all necessary connections  
through and around cities, designed to  
meet the requirements of the national  
defense and the needs of a growing  
peacetime traffic of longer range.”***



## ***Interstate System***

**“Together, the united forces of our communication and transportation systems are dynamic elements in the very name we bear - United States. Without them, we would be a mere alliance of many separate parts”**

**President Dwight David Eisenhower, February 22, 1955**



## ***Interstate System's Importance***

- Interstate System carries 41% of the travel on the State System while comprising 7% of the mileage
- Population is expected to increase by 44% to 2035
- Employment is expected to increase by 62% to 2035
- Daily travel on the Interstate Study system is expected to increase by 129% to 2035
- Daily travel on the Interstate Study system by commercial vehicles is expected to increase by 185% to 2035

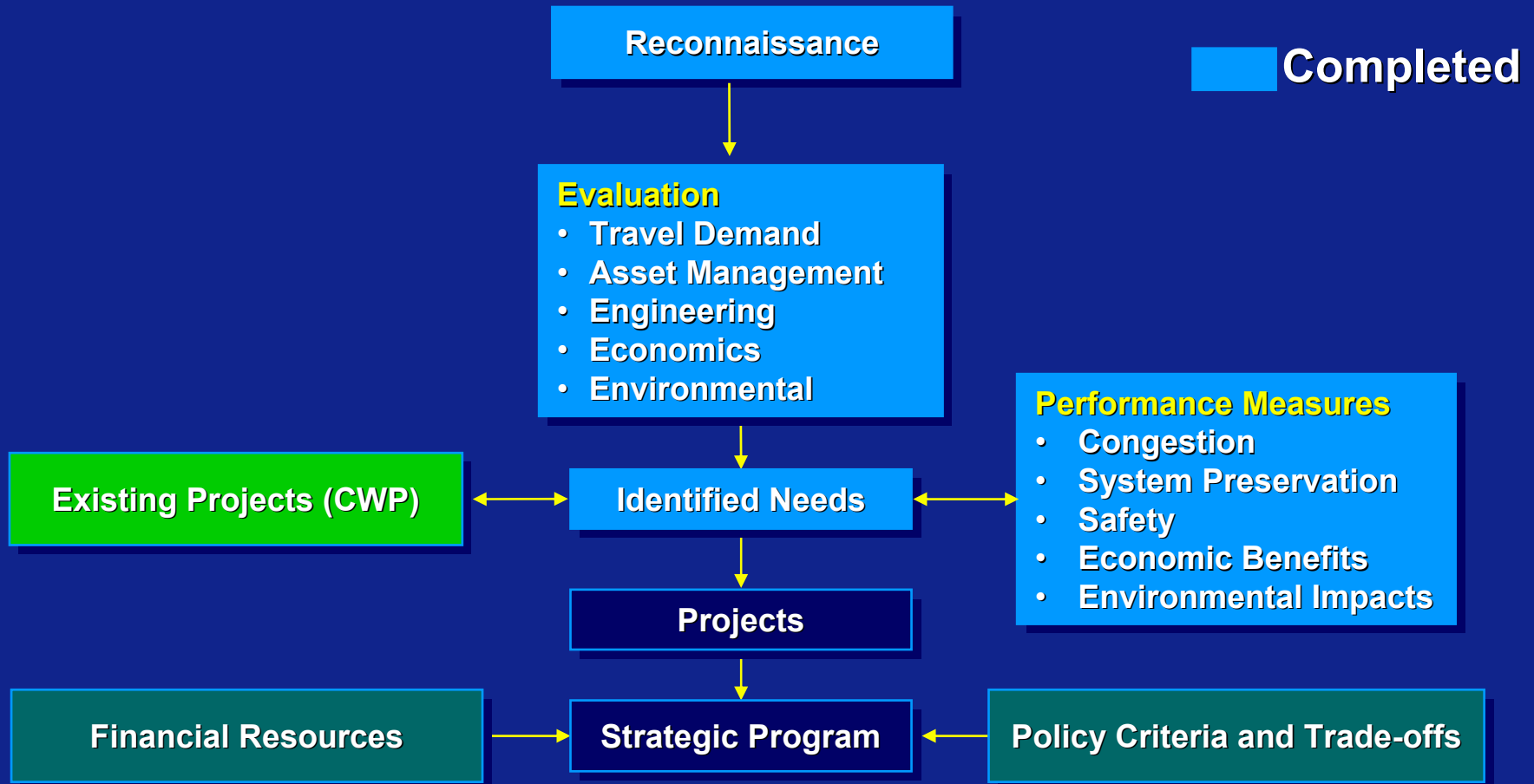
## ***Project Purpose***

***Goal: To protect and maintain the Interstate System to fully serve the needs of Georgia now and in the future***

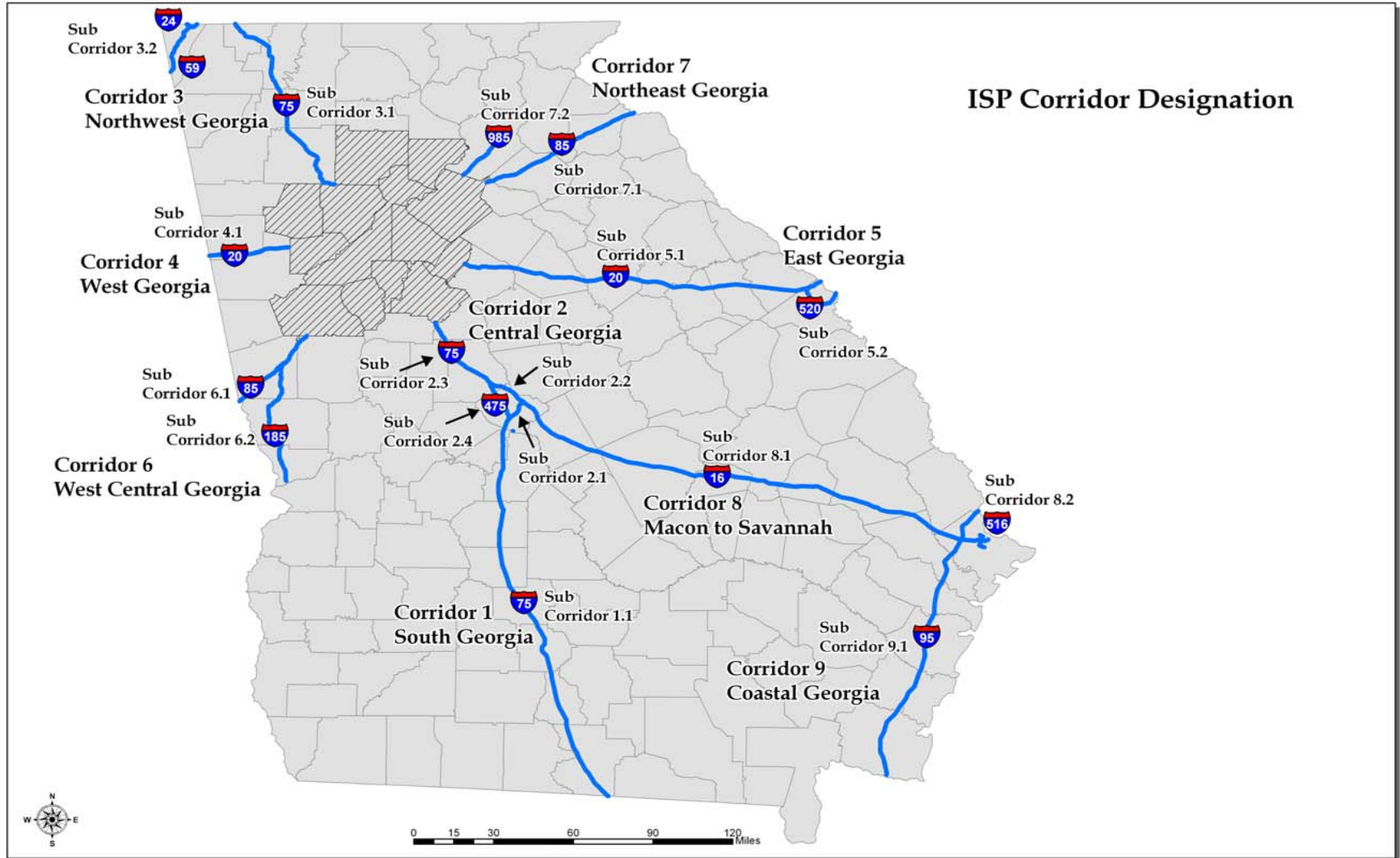
- **Evaluate conditions and operations**
- **Identify needs**
- **Determine improvements**
- **Recommend prioritized list of projects**

# Key Work Steps

## Strategic Program Development



# Map of Interstate Corridors



# ***Study System Profile***

## ■ **Rural**

■ **Interstate: 741 miles**

■ **Interchanges: 156**

## ■ **Bridges**

- **Mainline 432**

- **Overpass 274**

## ■ **Urban**

■ **Interstate: 183 miles**

■ **Interchanges: 85**

## ■ **Bridges**

- **Mainline 255**

- **Overpass 116**

## **Total System:**

**Interstate - 924 miles**

**Interchanges – 241**

**Bridges:**

**Mainline – 687**

**Overpass – 390**



# ***Focus of ISP Needs Evaluation***

- **Interstate Needs**
  - **Mainline**
  - **Bridges**
  - **Interchanges**
  - **Rest Areas**
  
- **Commercial Vehicle Network**
  - **Utilization and impacts**
  - **Truck weighing stations**

# ***Needs Typology and Measures***

## ■ Four Categories:

- Capacity – Level of Service (LOS)
- Safety – Fatality and Crash rates
- System Preservation – Bridge sufficiency and pavement serviceability
- Connectivity – Access to the Interstate System

## ■ Two snapshots

- Existing (2001)
- Future No-Build (2035)

# ***Summary of Needs - Capacity***

- **Methodology**
  - **Capacity Criteria – Level of Service (LOS) C or better**
- **System is currently operating at or above acceptable LOS for daily traffic**
- **Future 2035 No-Build Condition**
  - **455 miles (49%) operating below LOS C**
  - **91 interchanges (38%) operating below acceptable Level of Service**

# ***Summary of Needs - Safety***

- **Methodology**
  - **Crash Data Base (1995-1997 and 2001)**
  - **Safety Criteria: Priority 1 (Fatality rate) and Priority 2 (Crash rate)**
- **Current condition on Interstate Study System**
  - **Fatalities averaged 0.90 fatalities per 100 MVMT (107 per year) compared to a system average of 0.87 per 100 MVMT**
  - **Crashes averaged 45 crashes per 100 MVMT (5,437 per year) compared to a system average of 89 per 100 MVMT**
  - **6% of system miles had a fatality rate noticeably above the average**
  - **8% of system miles had a crash rate noticeably above the average**
  - **97% of reported crashes not attributable to roadway characteristics/ conditions**
- **Future Level of Effort for Safety Projects**

# ***Summary of Needs – System Preservation***

## **■ Current Condition**

- **Bridges**
  - 10 bridges (1%) with a sufficiency rating below 50
  - 176 bridges (16%) with a vertical clearance below 16'6"
- **Pavement**
  - Serviceability rating below 3.5 PSR – 105 miles (11%)

## **■ Future 2035 No-Build Condition**

- **Bridges**
  - 50 bridges (5%) with a sufficiency rating below 50
- **Pavement**
  - Resurface / replace per system requirements

# ***Summary of Needs - Connectivity***

- **Methodology**
  - Connection to Interstate
  - County / Activity Centers connectivity
  - Connectivity to Intermodal facilities, military bases, hurricane evacuation routes
  - FHWA/GDOT interchange spacing guidelines
- **Connectivity levels to Interstate interchange**
  - Level 1 – 0 to 19 minutes travel time
  - Level 2 – 20 to 39 minutes travel time
  - Level 3 – 40 to 59 minutes travel time
  - Level 4 – 60+ minutes travel time

## ***Summary of Needs - Connectivity***

- **Interstate System is well connected**
- **County connectivity to Interstate interchanges (peak time)**
  - **Level 1: 56 counties – 0 to 19 minutes travel time**
  - **Level 2: 48 counties – 20 to 39 minutes travel time**
  - **Level 3: 23 counties – 40 to 59 minutes travel time**
  - **Level 4: 19 counties – 60+ minutes travel time**
- **All military bases are well connected**

# ***Summary of Needs – Connectivity***

- **Key Transportation Network**
  - **National Highway System (NHS)**
  - **Strategic Highway Network (STRAHNET)**
  - **Governor's Road Improvement Program (GRIP)**
  - **Surface Transportation Assistance Act (STAA)**
    - Fully connected to the Interstate (56 interchanges )
    - Future 2035 No-Build – 50 of 56 interchanges require improvement
- **2003 Hurricane Evacuation Plan**
  - **All target counties well connected**
- **FHWA/GDOT Interchange spacing guidelines**
  - **Maintain Interstate throughput capacity**
  - **19 Feasibility Studies or Interchange Justification Report (IJR) filed with GDOT**



# Summary of Needs

- **Current System – relatively good condition**
  - Interstate carries 41% of travel which comprises 7% of the State System
- **Future 2035 No-Build Condition**
  - **Capacity**
    - 455 miles (49%) will operate below LOS C
  - **Safety**
    - Overall, the Interstate System is the safest way to travel
    - Only 1% of the study system crashes were attributed to “road defects” and 2% related to “standing water”
  - **System Preservation**
    - 50 bridges (5%) below a sufficiency rating of 50
    - 176 bridges (16%) below vertical clearance of 16’6”
    - Pavement – program resurfacing / replacement to maintain 3.5 PSR system average
  - **Connectivity**
    - 50 Interchanges require improvement
    - Maintain Interchange spacing guidelines to preserve Interstate throughput capacity

# ***Next Steps – Technical***

- Review programmed projects
  - In the CWP
  - Long-range projects
- Develop program of projects
- Apply travel forecasting model
- Develop program of projects to solve needs
- Deliver system of analysis tools

## ***Next Steps – Public Meetings***

- **September 25th, Thursday, at the Georgia DOT District Office in Cartersville from 5 PM to 7 PM.**
- **September 30th, Tuesday, at the Coastal Georgia RDC in Brunswick from 5PM to 7 PM.**
- **October 6th, Monday, at the Georgia DOT Area Engineer Office in Macon from 5 PM to 7PM.**

# *Interstate System Plan*

Questions ?

Questions ?

Questions?

